# **Telecommunications Engineer III**



Job Code 20000134 Job Family Technology Professional / Knowledge

Worker

**Department** Telecommunications **Reports to** Mgr **Union** Non-

Telecommunications **Status** Represented

FLSA Status Exempt Pay Grade 2058 This Job is a No

Lead

**Last Updated** 12/1/2022

## **Accountability for Workplace Culture**

Our PUD values are at the center of our culture. Putting the safety, health, and well-being of our communities and those we work with is valued above all else and everyone on Team PUD must meet this commitment daily. Nothing we do in achieving our Mission is worth a single injury, and all who interact with us must feel they are valued and welcomed as individuals.

Everyone on Team PUD, in all positions, is accountable for achieving this safe and welcoming culture by:

- 1. Taking full ownership for the safety of themselves and their coworkers, while ensuring everyone feels valued and welcomed.
- 2. Taking action to identify and eliminate their own and others' at-risk behaviors, including the behaviors that may undermine another's feelings of being welcomed and valued.
- 3. Following all safety rules and regulations and ensuring the PUD's expectations for conduct and respect are maintained.
- 4. Openly sharing near-misses, safety learning opportunities, and ways we can learn to be a more welcoming place while encouraging others to do the same.
- 5. Utilizing Stop Work Authority to intervene with anyone, anytime, in any place.
- 6. Intervening or seeking guidance to stop actions that are harmful to the wellbeing, health, or sense of belonging of others, and which are detrimental to our PUD values.

#### **Job Summary**

Plans, designs, develops, and engineers the District's telecommunications data transport and land mobile radio systems. Responsible for multiple functional technology areas within the telecommunications network. Provides consistent detailed, and accurate project documentation to technical staff and engineers for efficient and timely completion of work. Ensures compliance with all applicable governmental, industry, and District standards and policies.

#### **Accountabilities**

#### Accountability #1

Demonstrate a culture of caring, mutual respect and trust that encourages and empowers employees to do their best work for the benefit of our team members, customers, partners and stakeholders by Being collaborative; Advocating for the District, the department, and your peers; and respecting the time and resources of others.

## Accountability #2

Ensure the delivery of exceptional value to our customers through continual improvement and innovation by identifying personal knowledge gaps and pursuing available training resources to fill them; attending assigned technical training; sharing knowledge; training lower-level classifications; providing and being open to receiving feedback, and similar responsibilities.

#### Accountability #3

Delivers outstanding value relative to cost to our customers by delivering efficient, and cost-effective telecommunications data transport and land mobile radio systems by providing consistent detailed, and accurate project documentation to technical staff for medium to large projects; managing large network wide projects; monitoring system performance and providing engineering support to technical staff as issues arise; maintaining and updating accurate documentation; coordinating technical work efforts to ensure they are in-line with department's immediate to mid-term plans; remaining current with the telecommunications and utility industry through attending conferences, reading industry publications, networking with peers at other utilities, and other available methods, and similar responsibilities.

#### Accountability #4

Maintains a telecommunications network that meets internal and external customer needs and expectations by regularly and proactively engaging them to discuss current and long-term needs and circuit performance; communicating proactively with the other District department and telecom engineering staff and District peers to ensure coordinated work efforts; engineering solutions to reduce risk and increase reliability; notifying customers when service is affected or will be affected; providing consulting advice on the capabilities of the network, and similar responsibilities.

## Accountability #5

Maintains compliance of all applicable District, regulatory, safety, and governmental policies, rules, and regulations including but not limited to FCC, FAA, NERC, and the District by being knowledgeable of such rules; seeking help from senior telecommunication staff for clarification and help when needed; maintaining applicable reporting and documentation as assigned; investigating noncompliance and escalating as necessary, and similar responsibilities.

#### Accountability #6

Ensures continual improvement efforts that delivers outstanding value to our customers by maintaining multiple project long-term budgets that aligns with the District's initiatives while ensuring the long-term sustainability of telecommunication network; clearly and proactively communication the impact of financial decisions with the lead and manager; performing cost benefit analysis on large scale projects within the department; and optimizing the usage of existing and future District assets.

## Accountability #7

Demonstrate powerful partnerships that serve as a valuable resource for our customers and partners by maintaining positive and mutually beneficial relationships with existing and future vendors; being the department's single point of contact; holding vendors accountable to service level expectations; conducting business in a professional, respectful, and fair manor; being accountable for all agreed upon District obligations (including accurate billing of services provided and timely payment of invoices), and similar responsibilities.

Accountability #8			
Accountability #9			
Accountability #10			

## **Minimum Qualifications Note**

The minimum qualifications listed below are representative of the knowledge, skills, and abilities needed to perform this job successfully, as described in the Accountabilities. Reasonable accommodations may be made to enable individuals with disabilities to perform the essential Accountabilities (duties and responsibilities) of this position. If you need assistance and/or a reasonable accommodation due to a disability during the application or recruiting process, please contact Human Resources at

HRRecruiting@snopud.com, or by phone at 425-783-8655.

## **Qualifications – Education and Experience**

#### **Minimum** Required Education and Experience:

Bachelor of Science in Engineering, Computer Science, or related field, AND Four (4) years of experience in the Telecommunications or a related Electric Utility field;

OR

Eight (8) years of experience in the Telecommunications or a related Electric Utility field.

## **Preferred Education and Experience:**

## Qualifications – License(s) and/or Certification(s)

## **Minimum** Required License(s) and/or Certification(s):

Valid Washington State Driver's License

## Preferred License(s) and/or Certification(s):

Professional Engineer (PE) license

## **Qualifications – Skills and Abilities**

#### **Minimum** Required Skills and Abilities:

Advanced electronic theory and troubleshooting procedures.

Time Division Multiple Access (TDMA), Code Division Multiple Access (CDMA), Pulse Code

Modulation (PCM), and a variety of modulation/time domain technology.

Operation of electronics test and diagnostic equipment.

FCC rules and regulations on land mobile radio and microwave systems.

Installation, operation, maintenance, and repair of all types of communications and electronic equipment, especially RF mobile and Digital transport equipment.

Telecommunications network management systems.

Packet-switched (IP) network implementation and protocols (including VPNs, MPLS, MPLS-TP, Carrier ethernet).

Safety and technical practices.

Records and record keeping procedures.

Mobile, portable and base station radios, microwave and multiplex terminals and emergency power systems.

Communications programs for remote diagnostic use and computer programs for technical solutions.

Computer and peripheral hardware and their interfaces.

Engineering principles and computer programming and scripting languages appropriate to various types of platforms and applications.

Engineering economics.

RF systems specifically UHF, VHF, 800/900 MHz trunked communications system.

Digital microwave.

Antenna Design.

SONET based network design and layout.

Multiple communications protocols, ICCP, DNP3, TCP/IP, IEEE 802.1, etc.Digital LAN/WAN design.

Equipment and site layouts.

Fiber Optics and telecommunications cable plant.

NERC/CIPWashington WAC 296-32 and all other applicable safety standards.

Communicate and work effectively, both orally and in writing, with various levels of the organization, outside agencies, and customersInterpret and apply District directives, policies and procedures.

Use independent and discretionary judgment.

Effectively coordinate a variety of activities. Manage confidential information.

Manage and supervise complex functions, programs, projects and department budgets.

Analyze, critique, and evaluate network problems and solutions.

Resolve issues using collaborative, team techniques.

Negotiate and facilitate change in the organization.

#### **Preferred Skills and Abilities:**

## **Competencies**

The following competencies describe the cluster of behaviors associated with job success in the job group identified as "Professional / Knowledge Worker".

Adaptability

- Building Customer Loyalty
- Building Partnerships
- Communication
- Continuous Improvement
- Continuous Learning
- Courage
- Decision Making
- Earning Trust
- Emotional Intelligence Essentials
- Facilitating Change
- Influencing
- Initiating Action
- Innovation
- Leveraging Feedback
- Mentoring
- Planning and Organizing
- Positive Approach
- Professional Knowledge and Aptitude
- Stress Tolerance
- Technology Savvy
- Valuing Differences
- Work Standards

Physical Demands List	Frequency
it	Frequent (34-66%)
Valk	Frequent (34-66%)
itand	Frequent (34-66%)
Drive	Occasional (11-33%)
Work on ladders	Occasional (11-33%)
Climb poles or trees	Never
Work at excessive heights (note heights in open text box below)	Seldom (1-10%)
Twist	Occasional (11-33%)
Bend/Stoop	Occasional (11-33%)
Squat/Kneel	Occasional (11-33%)
Crawl	Never
Reach	Occasional (11-33%)
Nork above shoulders (note specific activity in open text box below)	Occasional (11-33%)
Jse Keyboard /mouse	Constant (67-100%)

Jse wrist (flexion/extension)	Seldom (1-10%)
Grasp (forceful)	Seldom (1-10%)
Fine finger manipulation	Seldom (1-10%)
Operate foot controls	Occasional (11-33%)
Lift (note weight in open text box below)	Occasional (11-33%)
Carry (note weight in open text box below)	Occasional (11-33%)
Push/Pull (note specifics in open text box below)	Seldom (1-10%)
Work rapidly for long periods	Never
Use close vision	Frequent (34-66%)
Use distance vision	Frequent (34-66%)
Use color vision	Frequent (34-66%)
Use peripheral depth perception	Frequent (34-66%)
Speak	Frequent (34-66%)
Hear	Frequent (34-66%)

Additional Physical Demands not listed above and associated frequency below.

Communication	Frequency
Understand and carry out simple oral instructions	Frequent (34-66%)
Understand and carry out complicated oral instructions	Frequent (34-66%)
Train other workers	Frequent (34-66%)
Work alone	Frequent (34-66%)
Work as a member of a team	Frequent (34-66%)
Follow standards for work interactions	Frequent (34-66%)
Write communications for clarity and understanding	Frequent (34-66%)
Speak with clarity with others	Frequent (34-66%)
Comprehension	Frequency
Read and carry out simple instructions	Frequent (34-66%)
Read and carry out complicated instructions	Frequent (34-66%)
Retain relevant job information	Frequent (34-66%)
Reasoning	Frequency
Read and interpret data	Constant (67-100%)
Count and make simple arithmetic additions and subtractions	Frequent (34-66%)
Use intermediate and/or advanced math	Occasional (11-33%)
Organization	Frequency

Plan own work activities	Frequent (34-66%)
Plan work activities of others	Frequent (34-66%)
Direct work activities of others	Frequent (34-66%)
Resilience	Frequency
Work under pressure	Occasional (11-33%)
Work for long periods of time	Occasional (11-33%)
Work on several tasks at the same time	Occasional (11-33%)

Additional Mental Demands not listed above and associated frequency below.

## **Work Environment**

<b>Environmental Conditions List</b>	Frequency	
Exposure to weather	Occasional (11-33%)	
Wet and/or humidity	Occasional (11-33%)	
Atmospheric conditions	Never	
Confined/restricted working environment	Seldom (1-10%)	
Vibratory Tasks – High	Never	
Vibratory Tasks – Low	Never	

# Additional Environmental Conditions in this job not listed above and the associated frequency below.

Risk Conditions List	Frequency
Exposure to Heights	Seldom (1-10%)
Exposure to Electricity	Occasional (11-33%)
Exposure to Toxic or Caustic Chemicals	Seldom (1-10%)
Working with Explosives	Never
Exposure to Radiant Energy	Occasional (11-33%)
Extreme Cold	Seldom (1-10%)
Extreme Hot	Occasional (11-33%)
Proximity to Moving Mechanical Parts	Seldom (1-10%)
Noise Intensity	Occasional (11-33%)
Exposure to animals	Never
Working with angry customers	Occasional (11-33%)

On-Call Status and Frequency	
On-Call is required.	
⊙ Yes	
○ No	
On-call activities and frequency.	

Additional Risk Conditions present in this job not listed above and the associated frequency below.

#### **Work Location**

The primary assignment for this position is	The	primary	assignmen	t for	this	position	is
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Occasionally - 1x quarter or 4-6 times a year Callouts are rare.

- O Remote
- Office Hybrid
- On-Site
- O Field/Job Site

While this description has provided an accurate overview of responsibilities, it does not restrict management's right to assign or reassign duties and responsibilities to this job at any time. This position description is designed to outline primary duties, qualifications, and job scope, but not limit our employees or the organization to complete the work identified. In order to serve our customers best, each employee will offer their services wherever and whenever necessary to ensure the success of the District in serving our customers, to further the safety, health, and inclusivity of employees and the public, and achieve expectations of the District overall, while also remaining flexible in recognition of the employee's wellbeing.